National Weather Service

RFC Operations Team

RFC Survey Responses

Question - 01: In which region do you work?

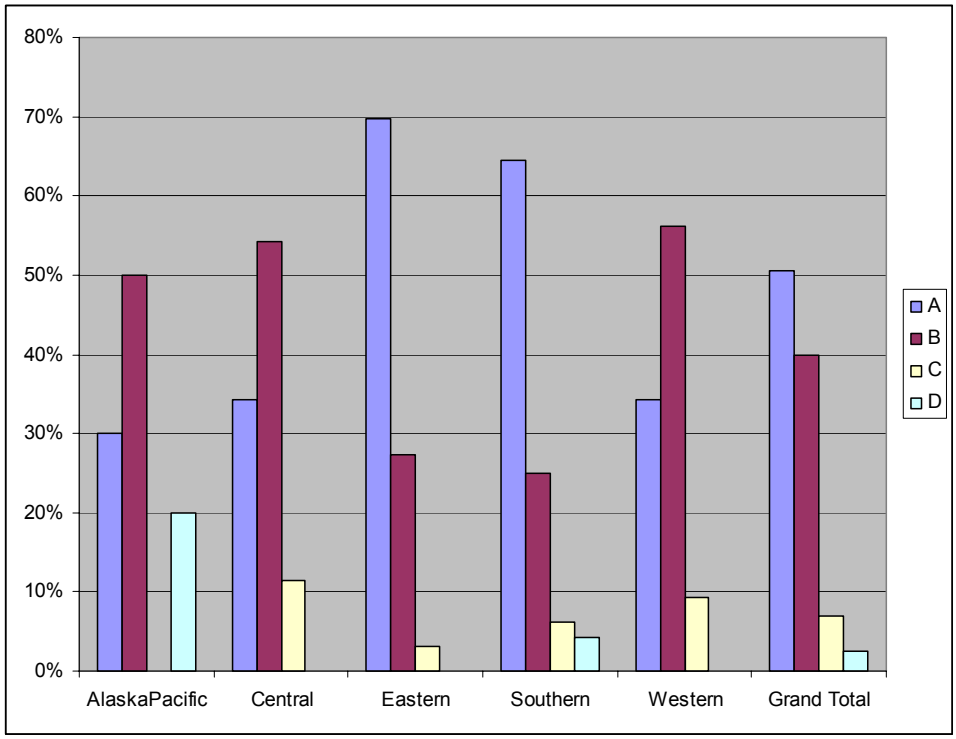
A.	33	Eastern
B.	35	Central
C.	48	Southern
D.	32	Western
E.	10	Alaska Pacific

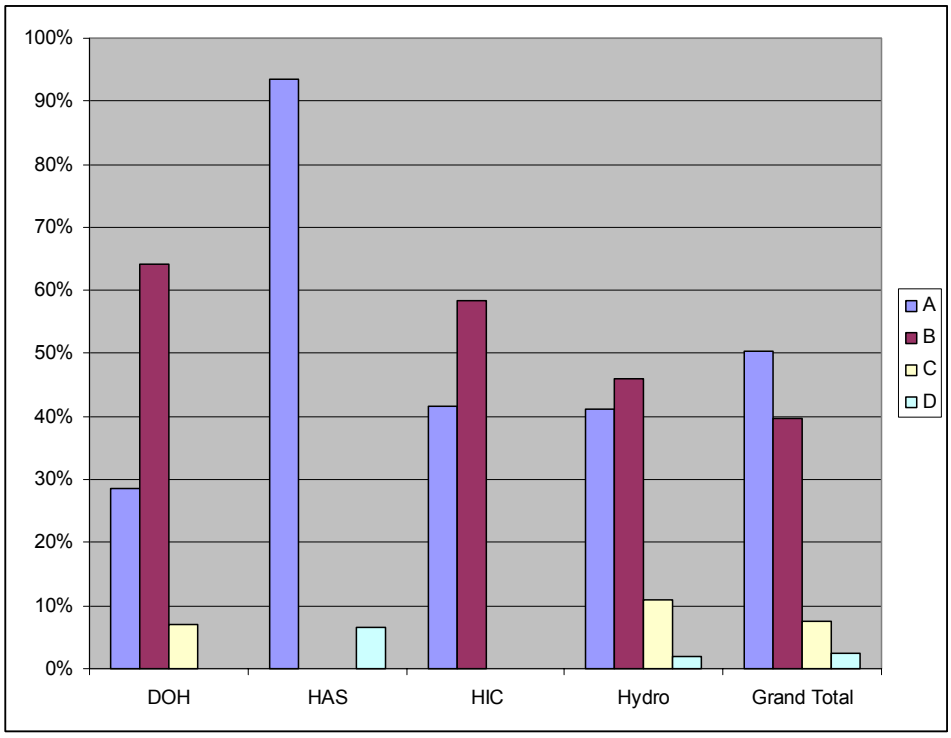
Question - 02: What position do you hold?

A.	12	HIC
B.	14	DOH
C.	102	Hydro Forecaster
D.	31	HAS Forecaster

Question - 03: What is your educational background?

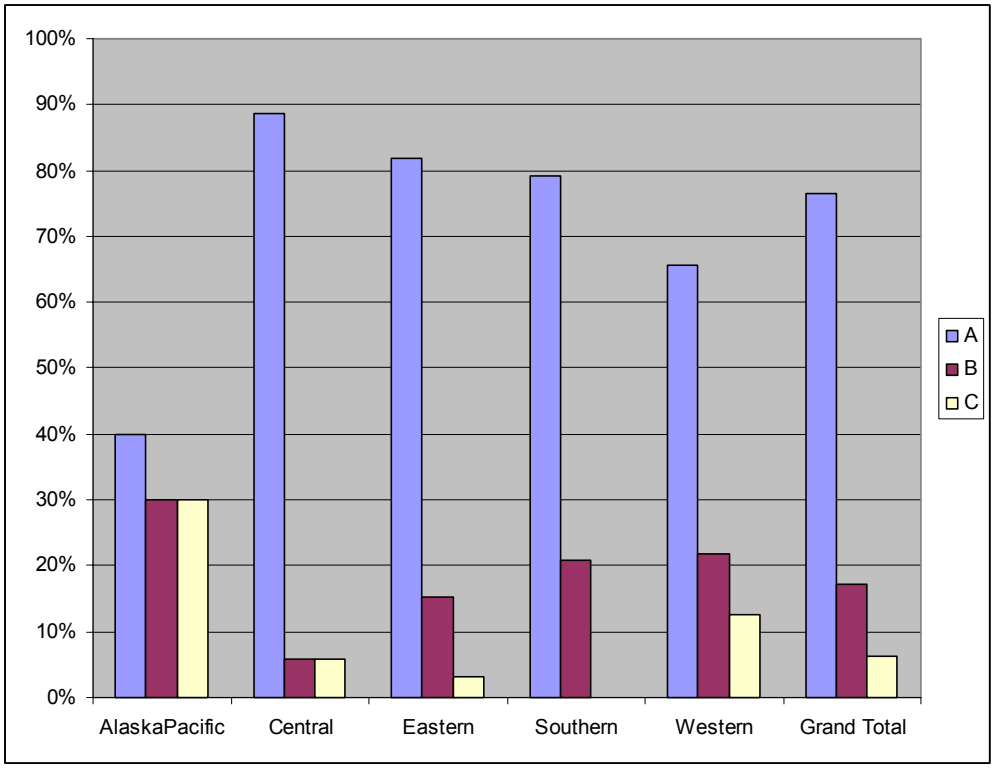
A. 80 - Meteorology
B. 63 - Hydrology
C. 12 - Physical Science
D. 4 - Other

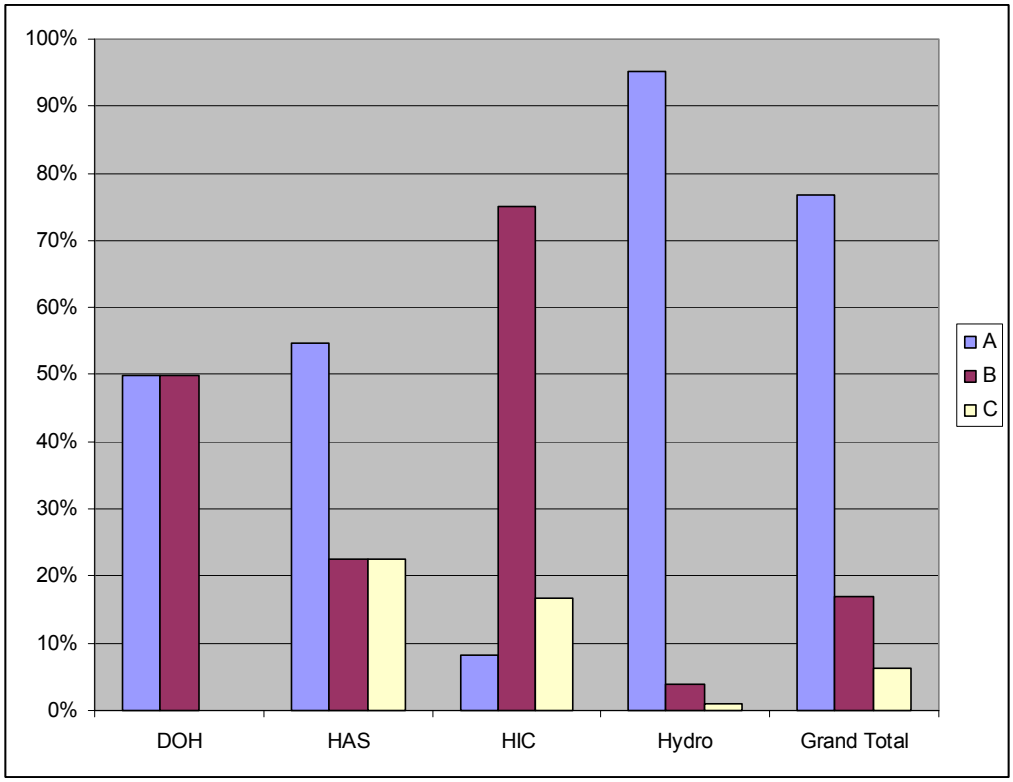




Question - 04: Do you perform hydrologic forecast functions at your office?

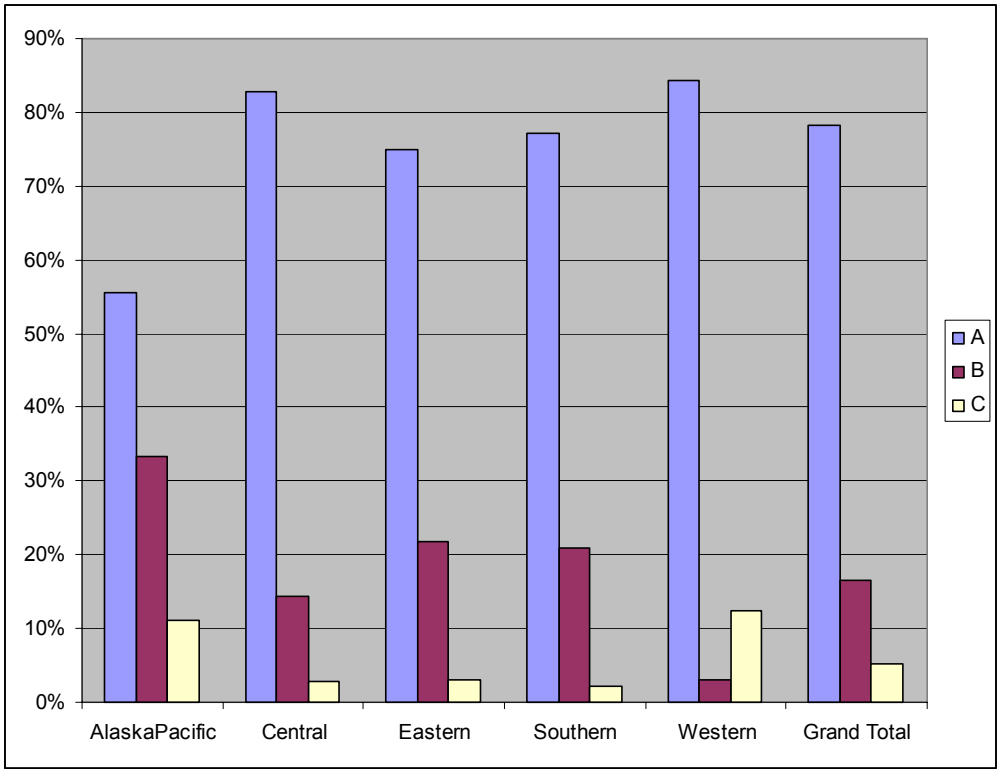
A. 122 - Routinely
B. 27 - Occasionally
C. 10 – Never

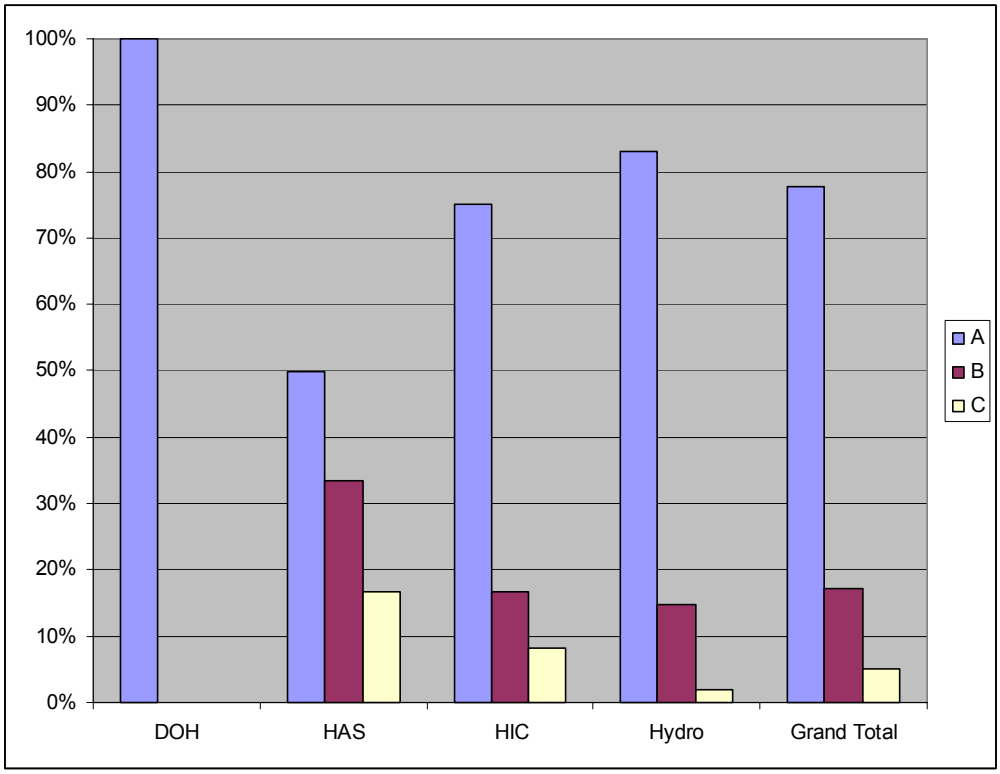




Question - 5: Do you feel adequately trained to perform the hydrologic function?

A. 122 - Yes
B. 27 - Somewhat
C. 8 - No
41 text responses





QUESTION - 5: Do you feel adequately trained for the hydro function?

- **Experience is the key trainer for RFC forecasters**

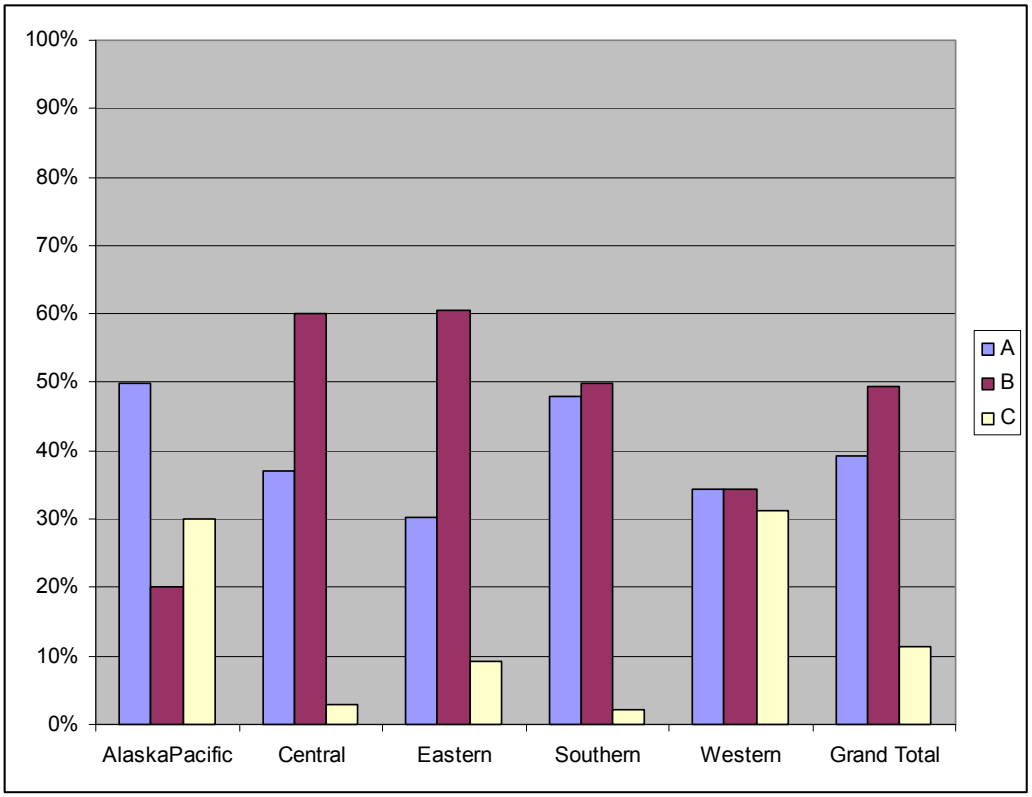
- **Training on GUIs is adequate; however better training is needed in the behind the scenes applications that are critical to the operations. Also, better training in the science aspects - snow model operations, appropriate use of MODs**

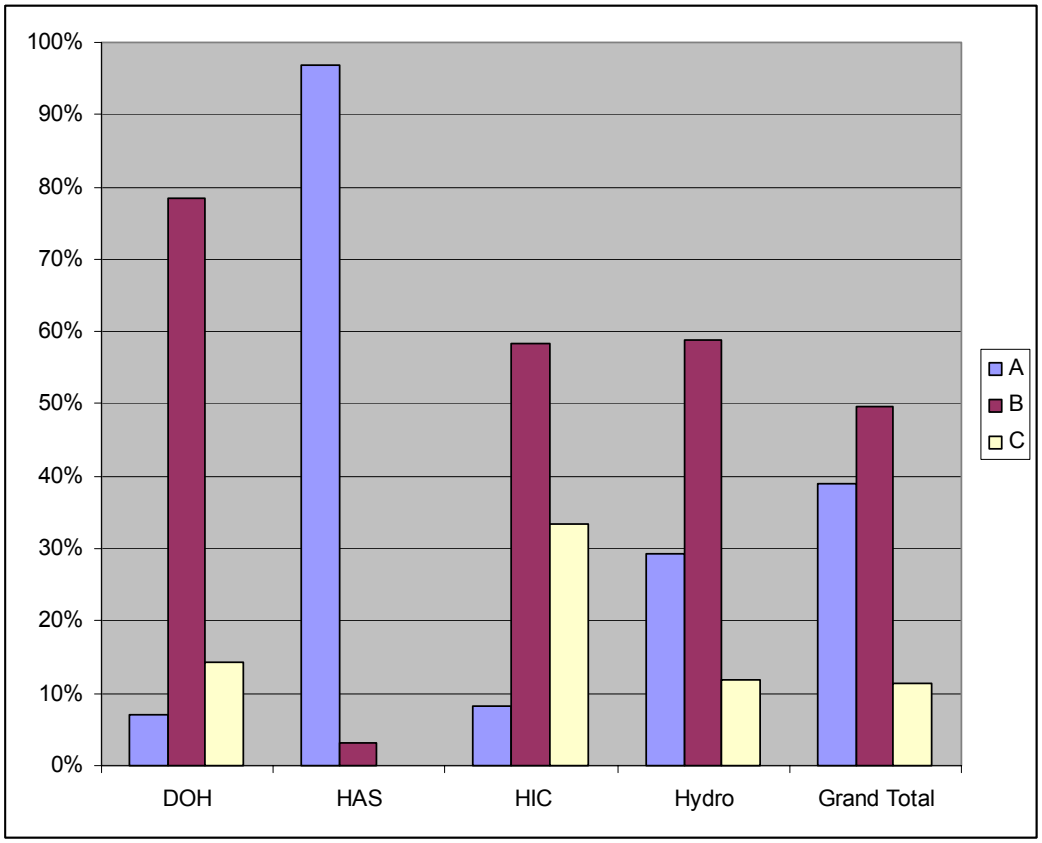
- **Need for Basic OFS training early in RFC career for all. In general better training and mentoring for new hires is needed**

- ***"... The flood forecasting being done from small cubicles inhibits hydrologists with many years of experience from sharing their knowledge with less experienced hydrologists. It also inhibits operations by making it difficult for hydrologists that work the mainstem and tributaries to communicate essential information and insight."***

Question - 06: Do you perform HAS forecast functions at your office?

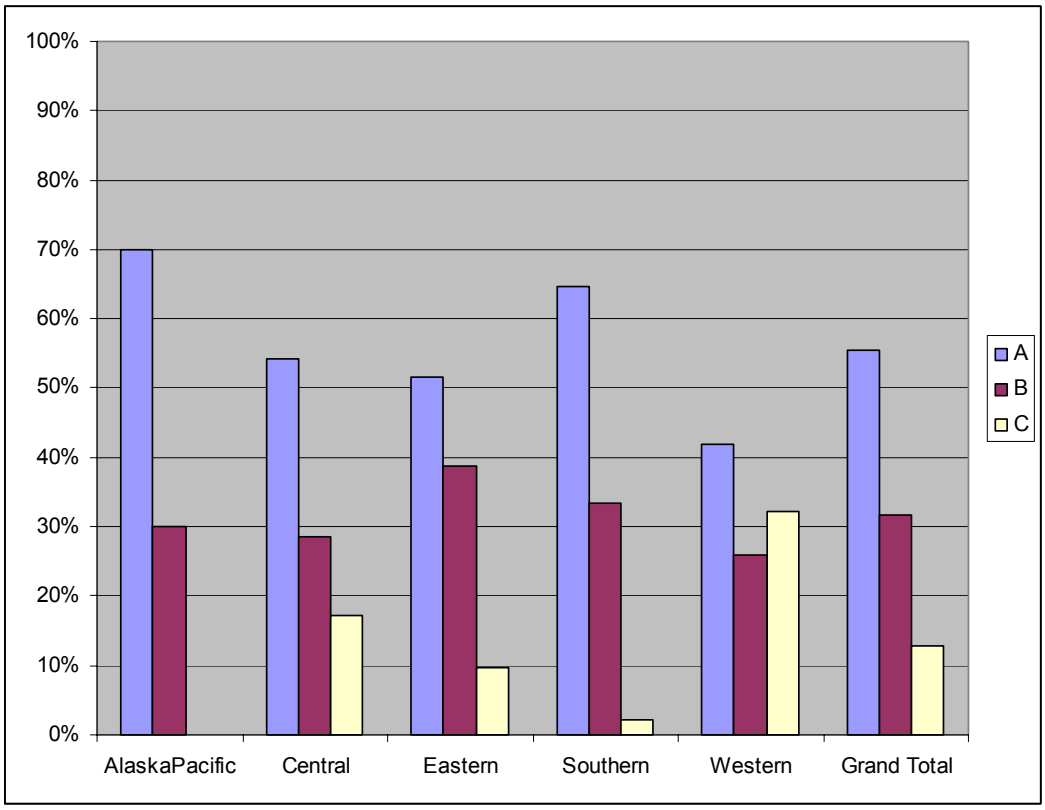
A. 62 - Routinely
B. 79 - Occasionally
C. 18 - Never

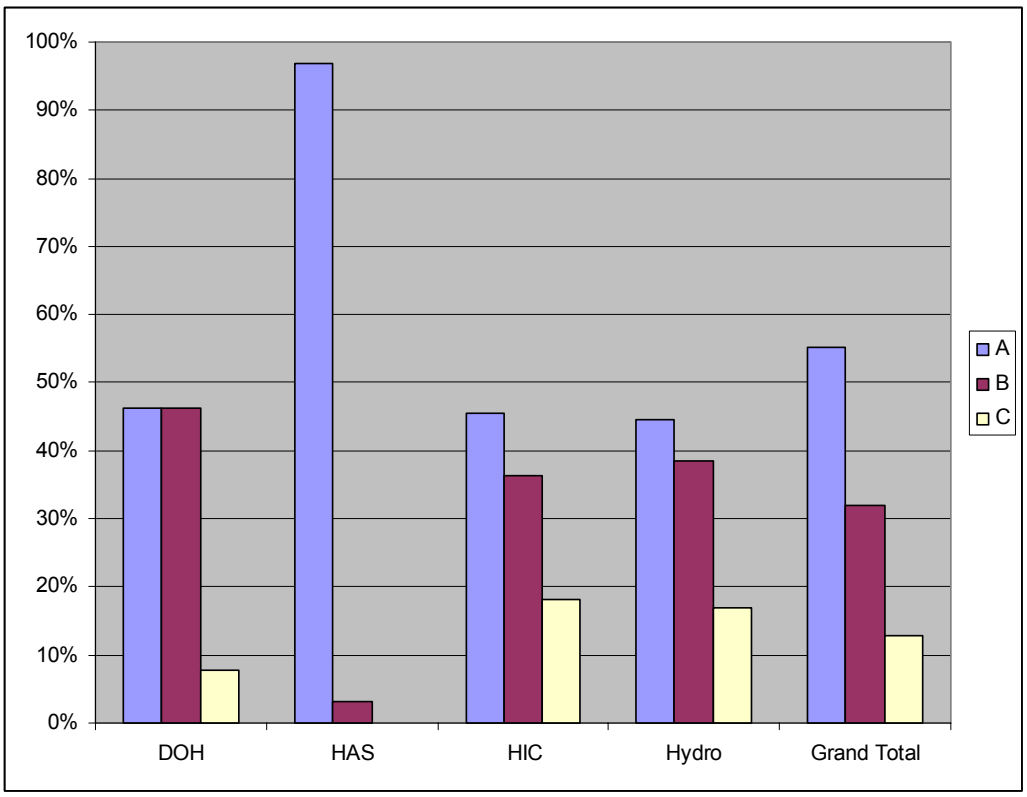




Question - 07: Do you feel adequately trained to perform the HAS function?

A. 86 - Yes
B. 50 - Somewhat
C. 20 - No
39 text responses





QUESTION - 7: Do you feel adequately trained to perform the HAS function?

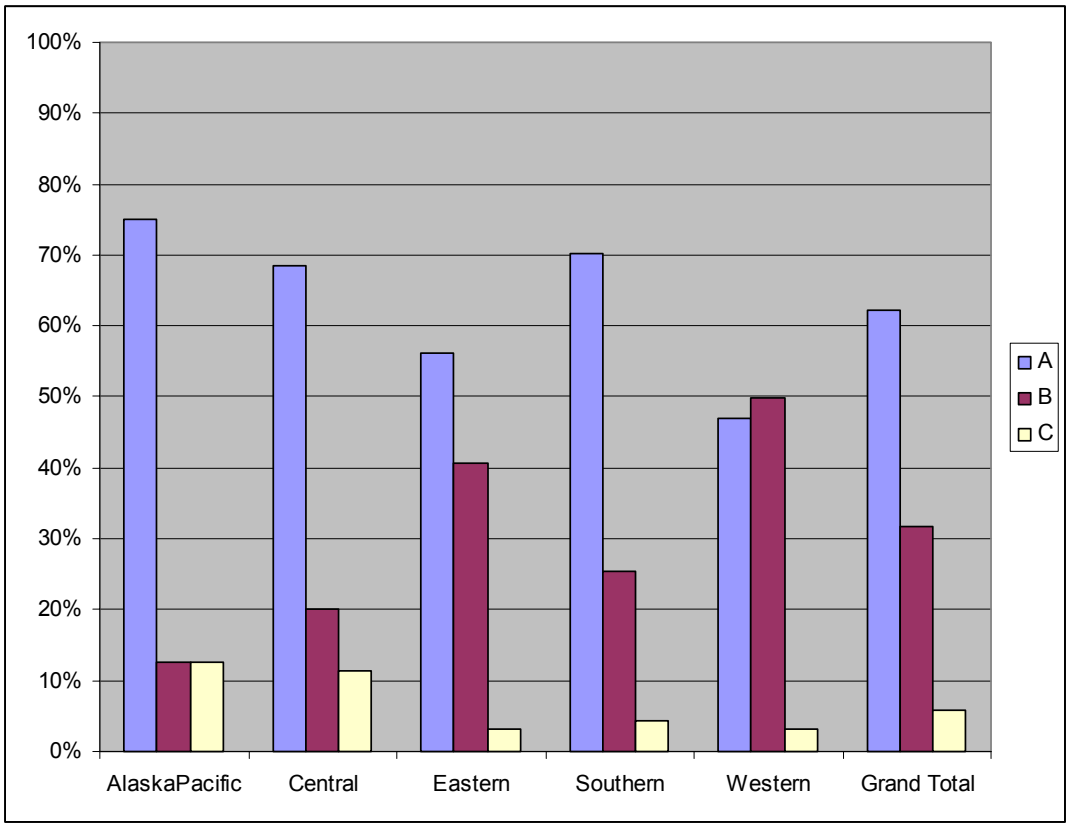
- **Civil Engineers working the HAS shift - do not have the detailed met training to develop QPF although they can run the basic shift operations and can generally get HPC QPF into model although not value added**

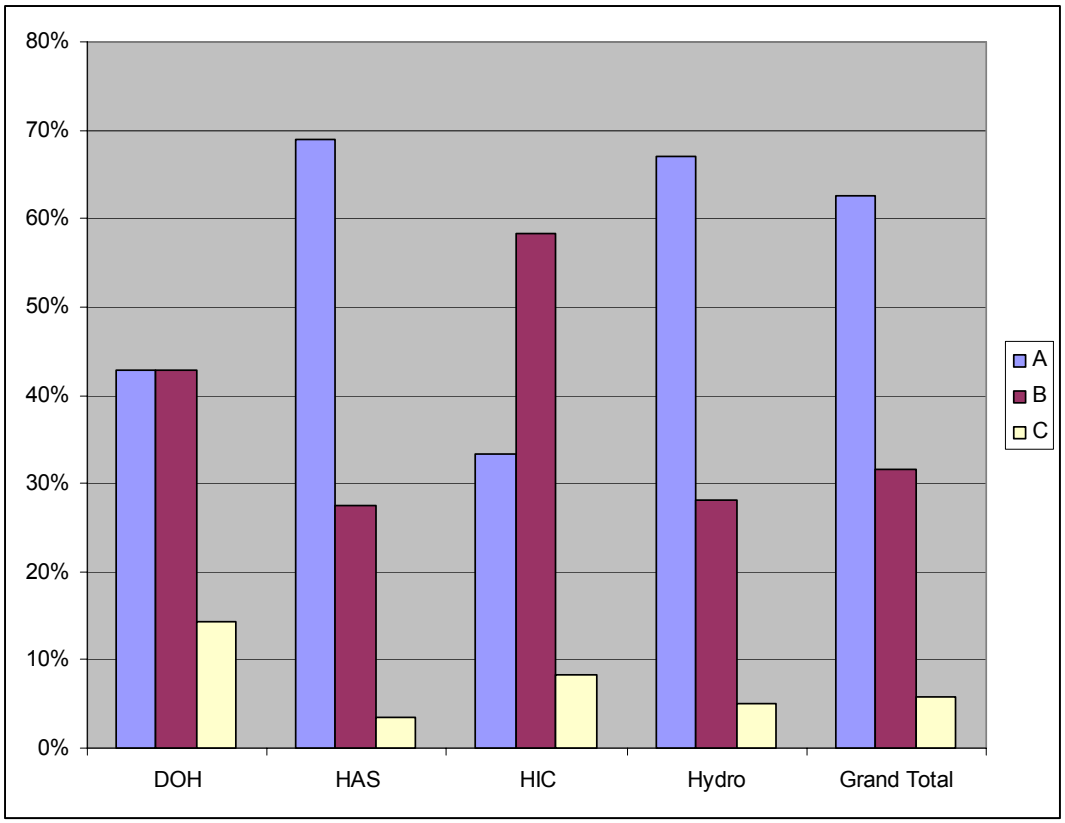
- **lack of frequency of HAS shifts may limit ability to gain expertise**

- **wide variety of training experience - no met training, COMET hydromet et al, qualified met**

Question - 08: How important is a local NWS contact in the delivery of products and services?

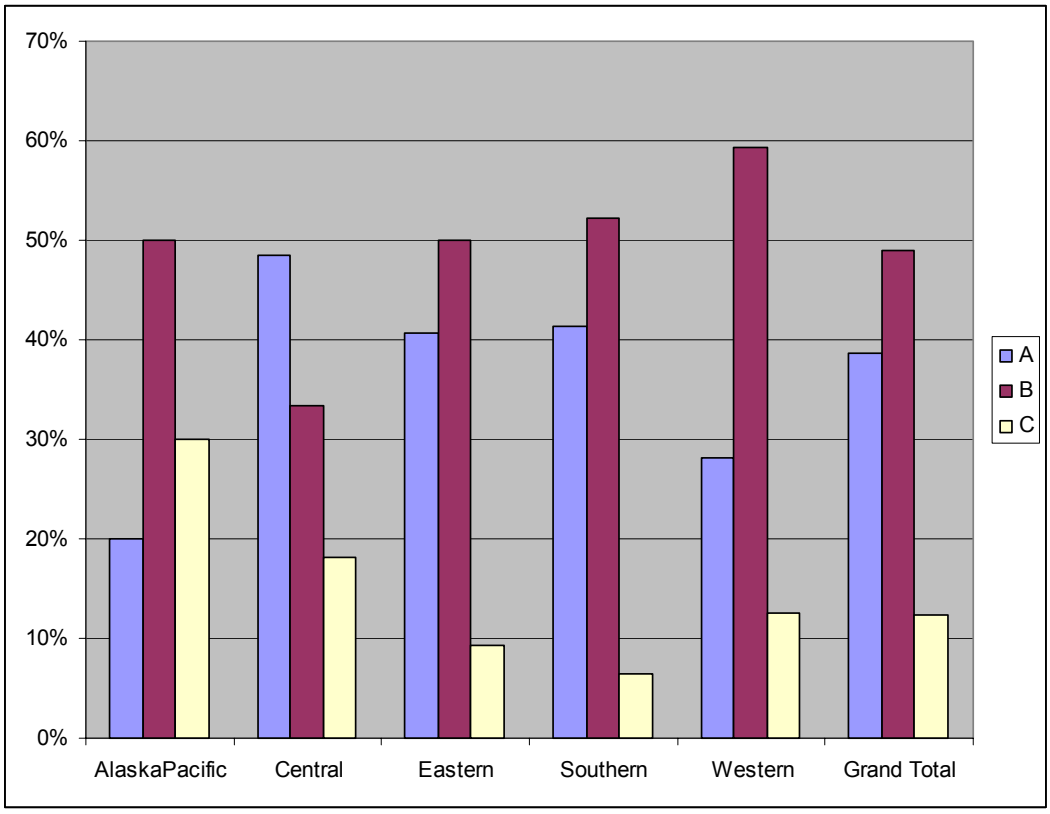
A. 97 - Extremely Important
B. 49 - Somewhat Important
C. 9 - Not Important

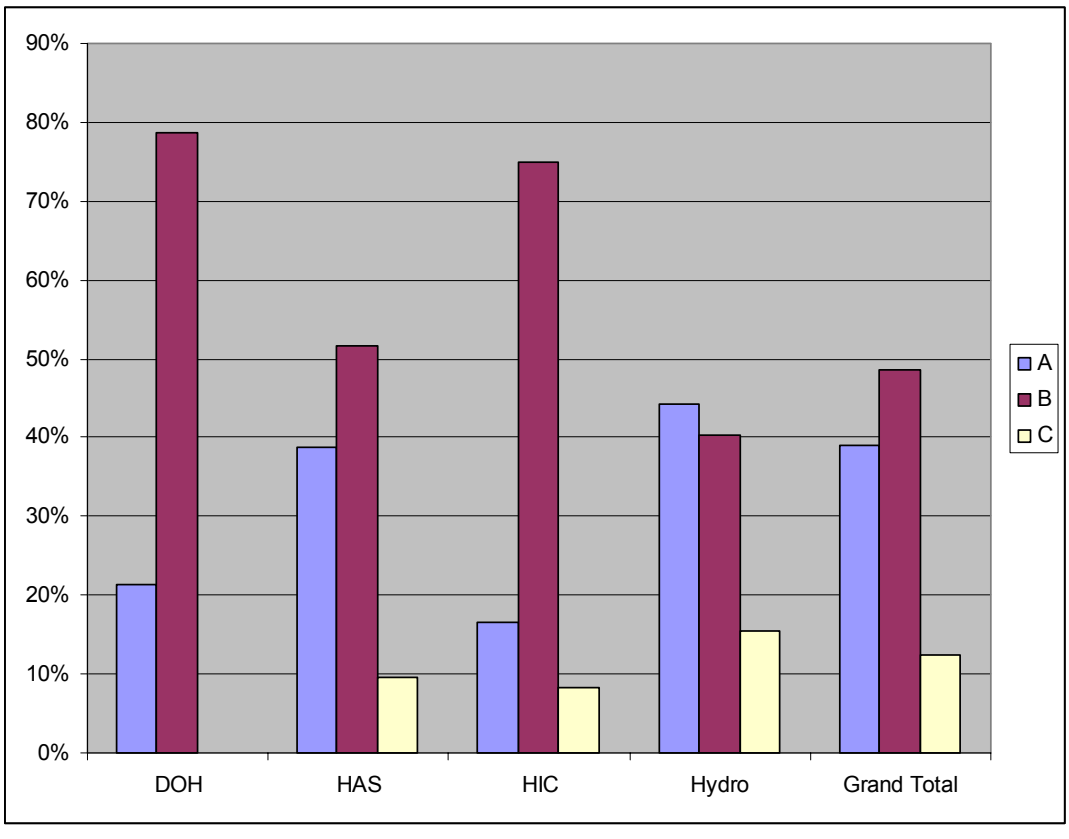




Question - 09: How important is a single NWS point of contact for our customers?

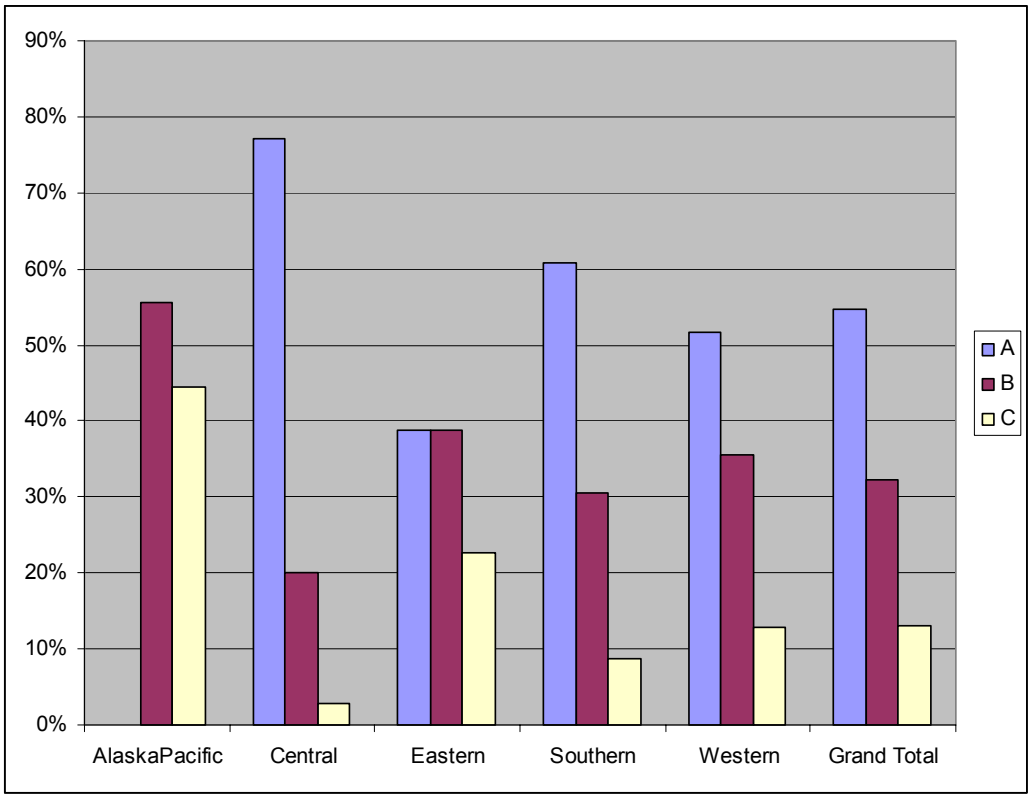
A. 60 - Extremely Important
B. 75 - Somewhat Important
C. 19 - Not Important

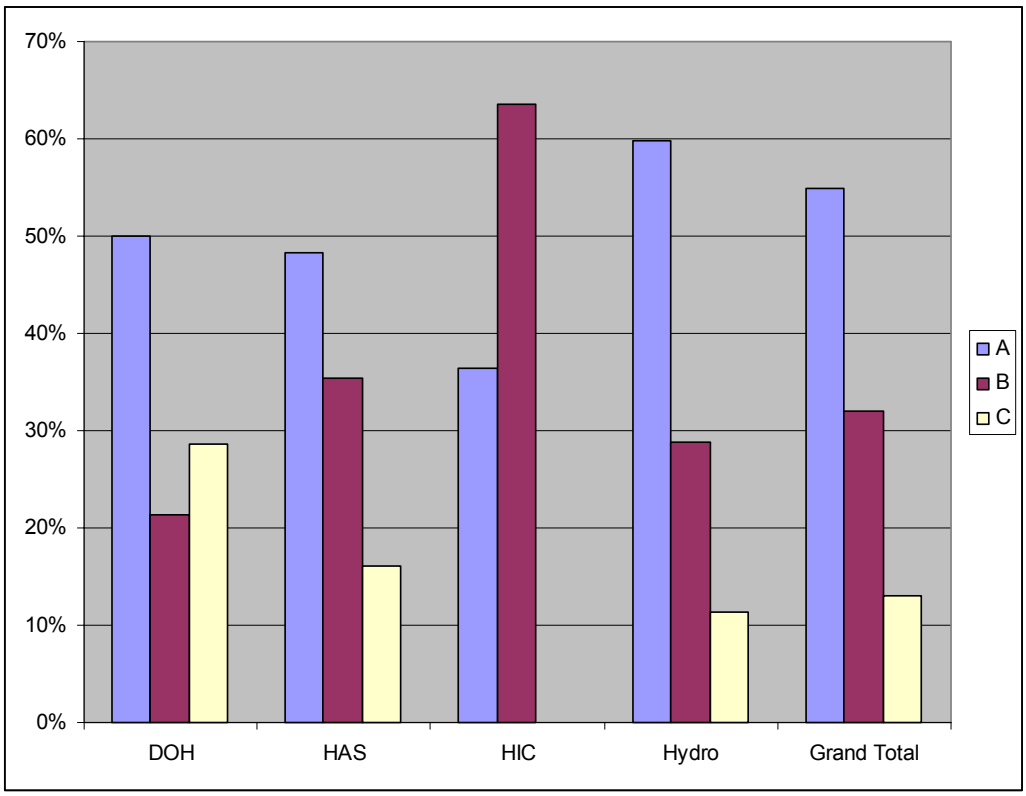




Question - 10: What is the impact of having the WFO issue the public hydrologic products?

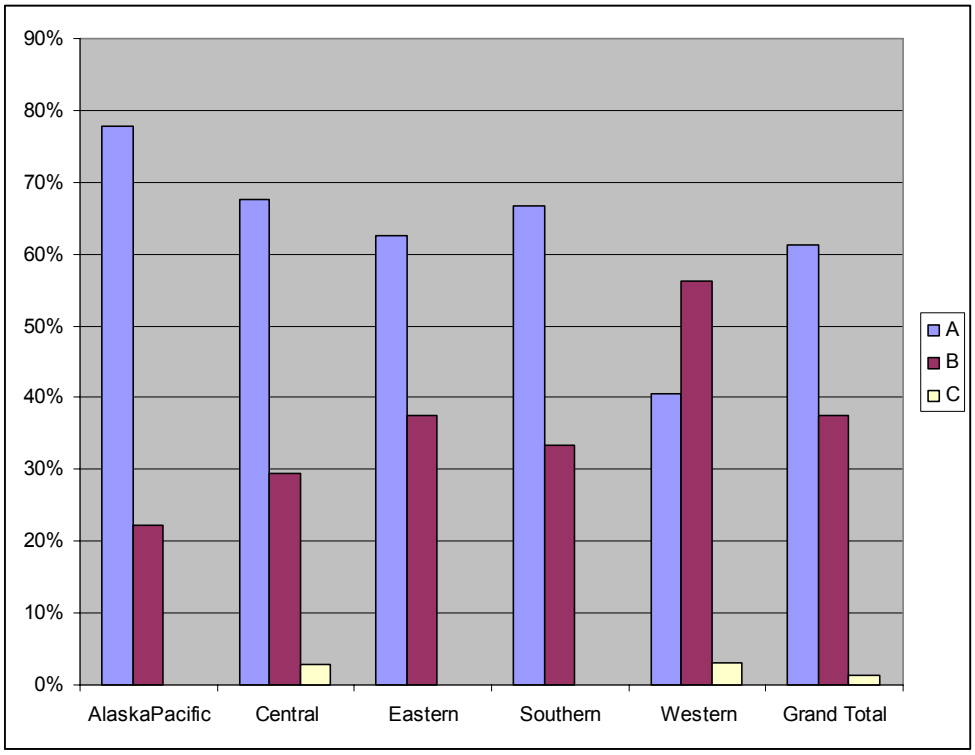
A. 84 - Improved
B. 49 - Neutral
C. 20 - Degraded





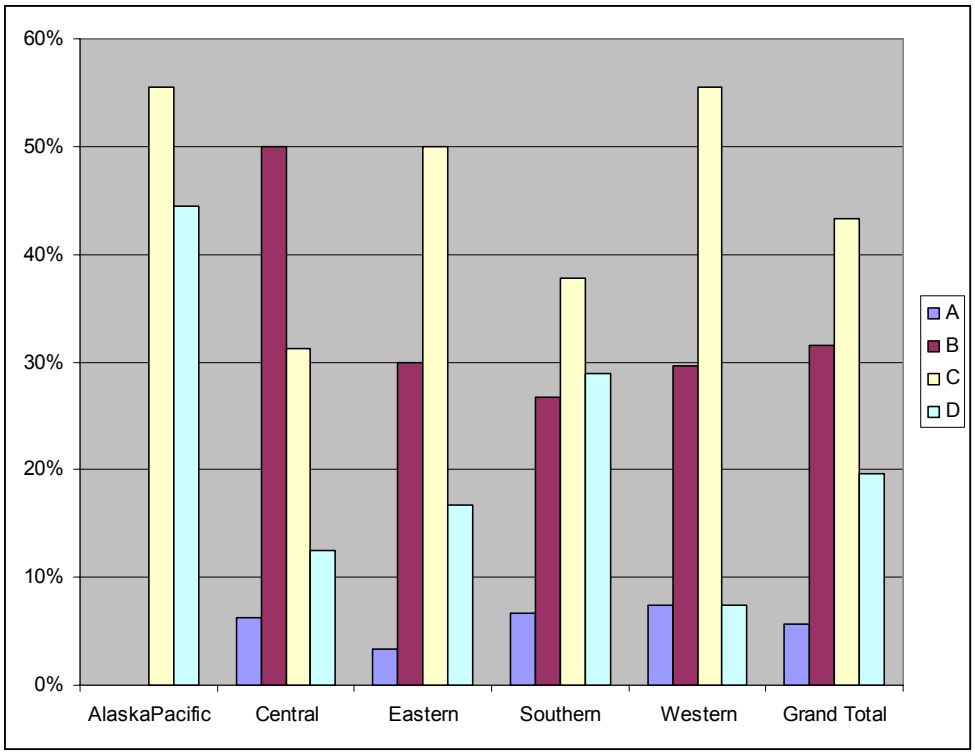
Question - 11: Does your office understand the hydrologic needs of WFO customers?

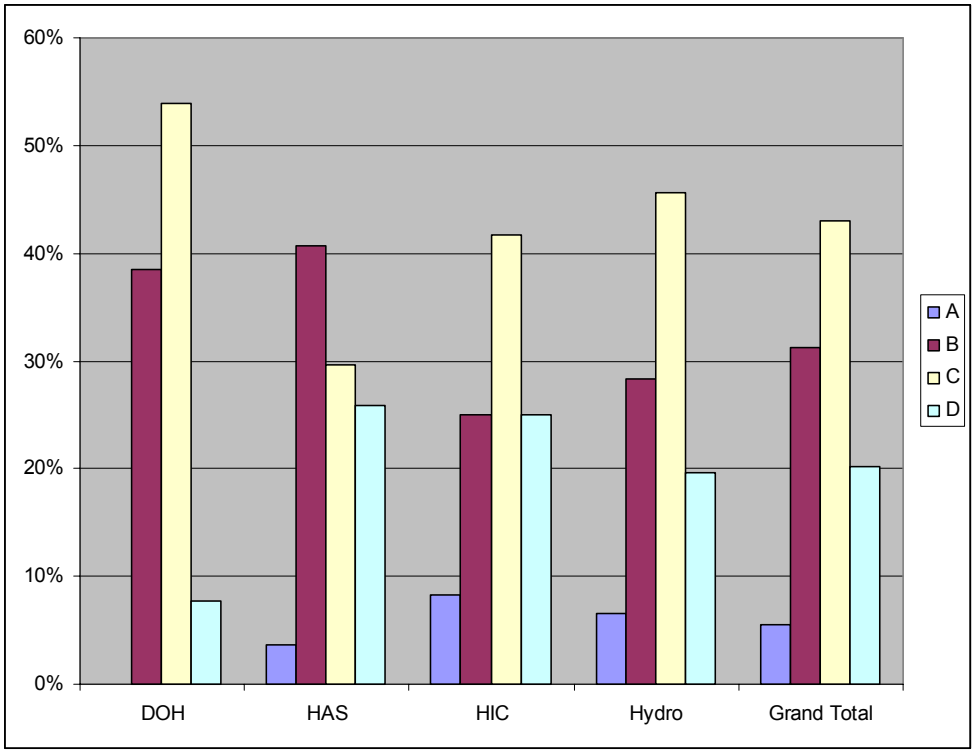
A. 95 - Yes
B. 59 - Somewhat
C. 2 - No



Question - 12: Please rate the WFO accomplishments in hydrologic outreach during the past 12 months?

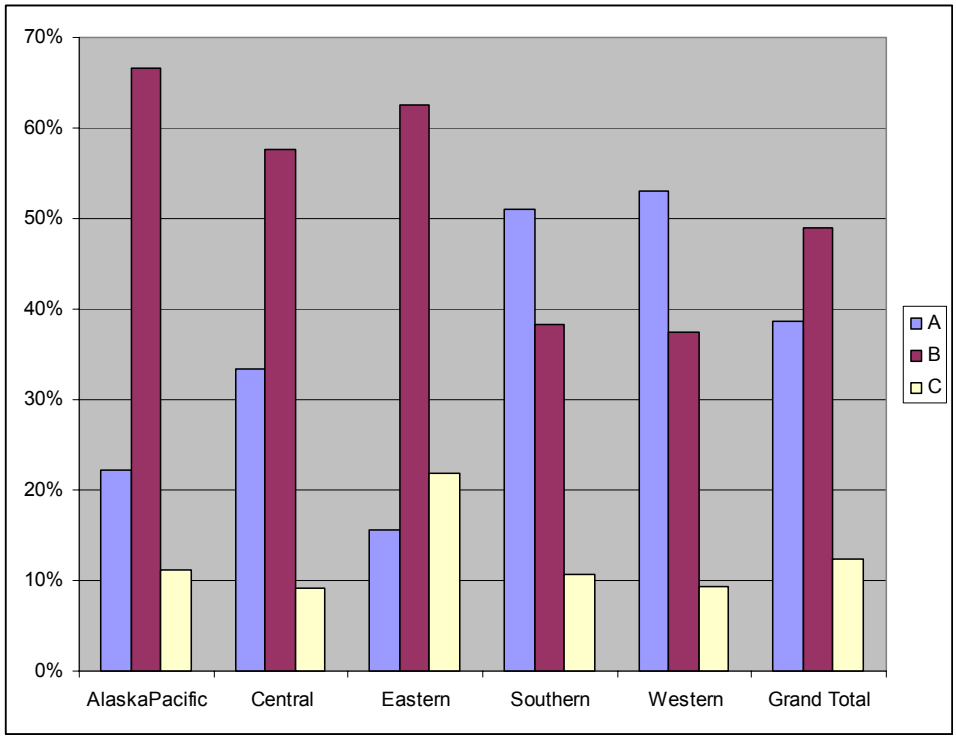
- **A. 8 - Excellent**
- **B. 45 - Good**
- **C. 62 - Adequate**
- **D. 29 – Poor**

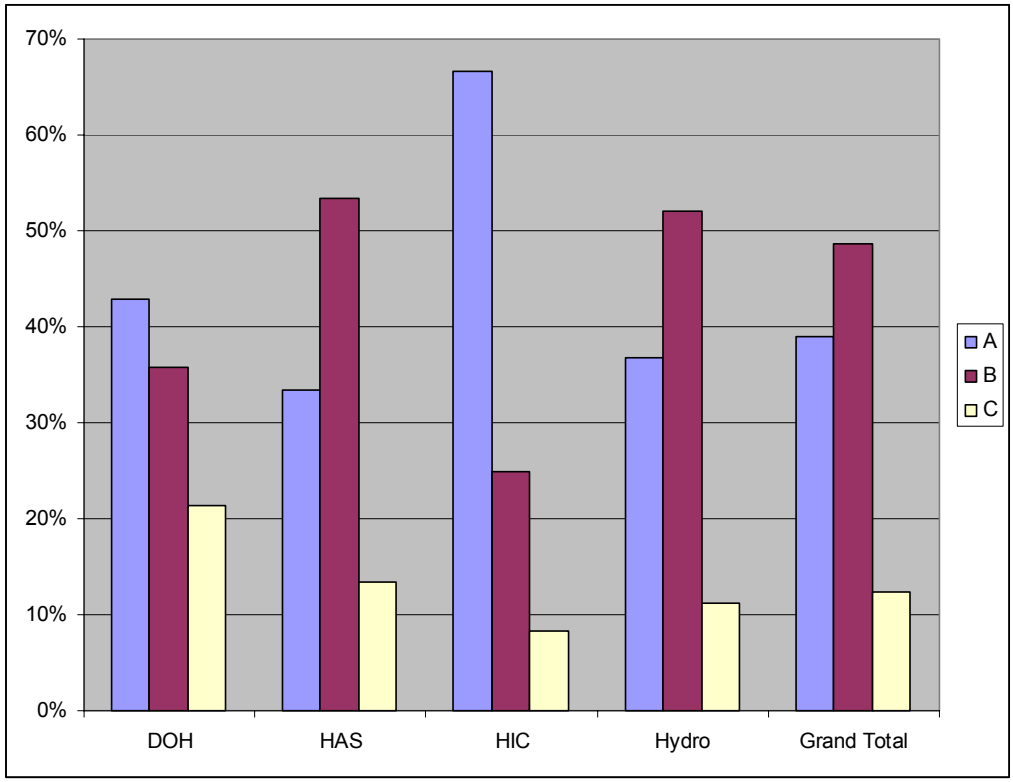




Question - 13: Please rate the responsiveness of the RFC office to WFO requests for new or expanded services?

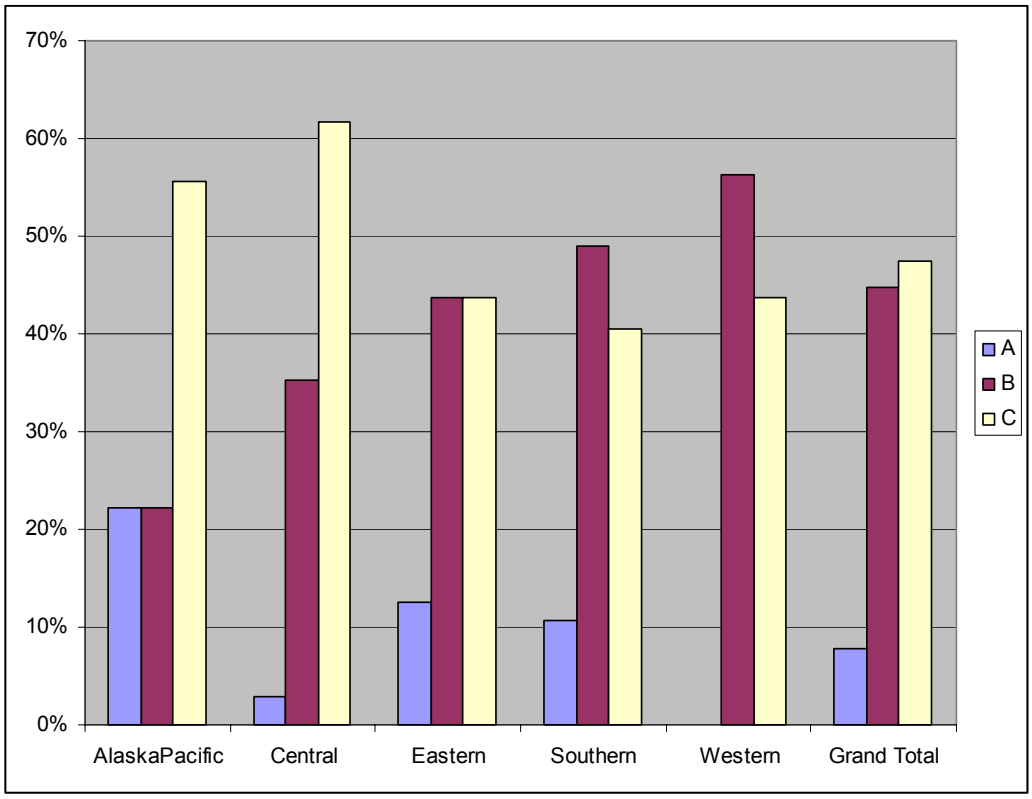
A. 60 - Excellent
B. 75 - Good
C. 19 - Fair

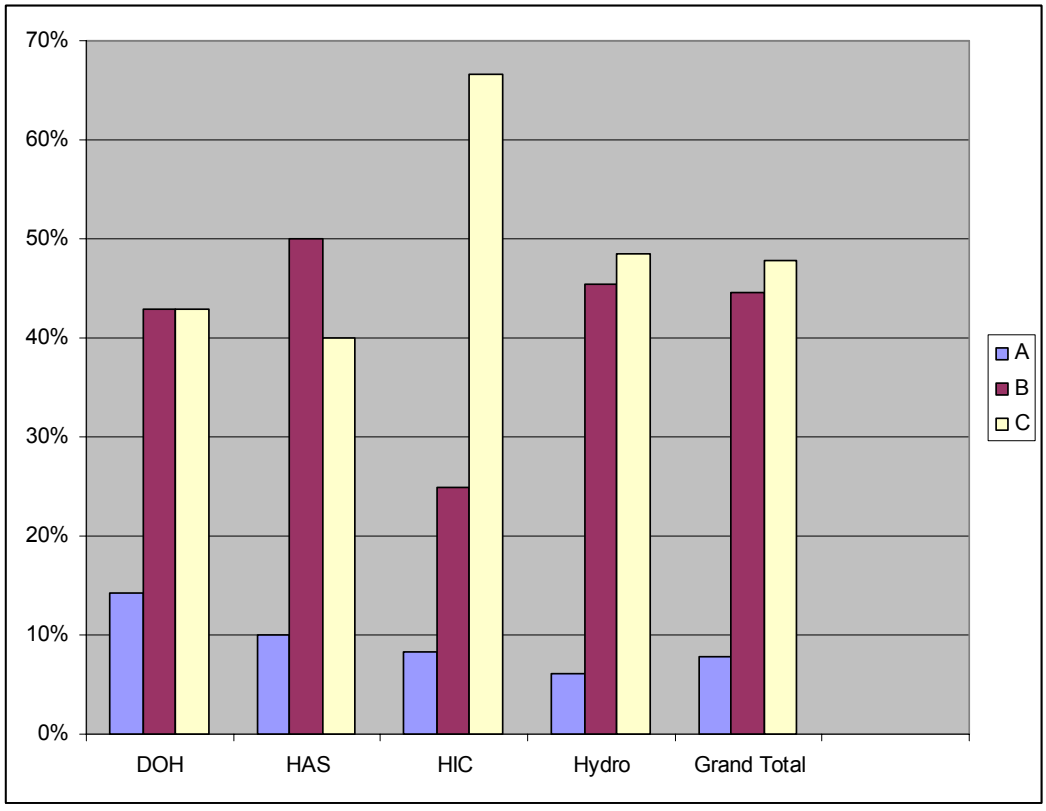




Question - 14: What field office should be responsible for the flash flood program?

A. 12 - RFC
B. 69 - WFO
C. 74 - Both RFC and WFO

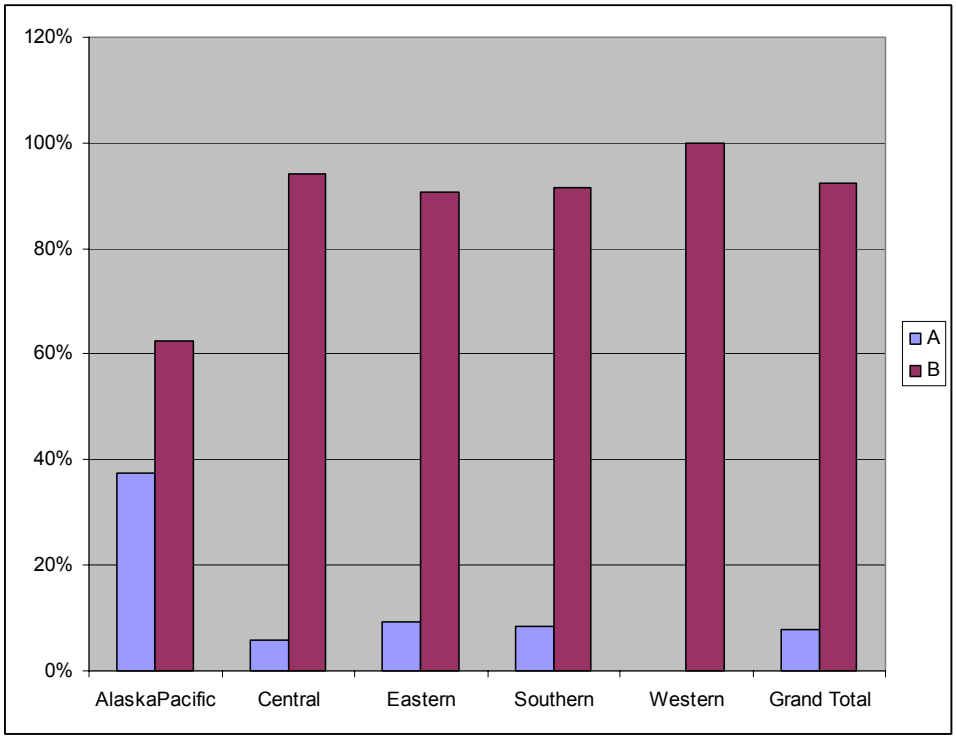




Question - 15: What field office should issue public flash flood watches and warnings?

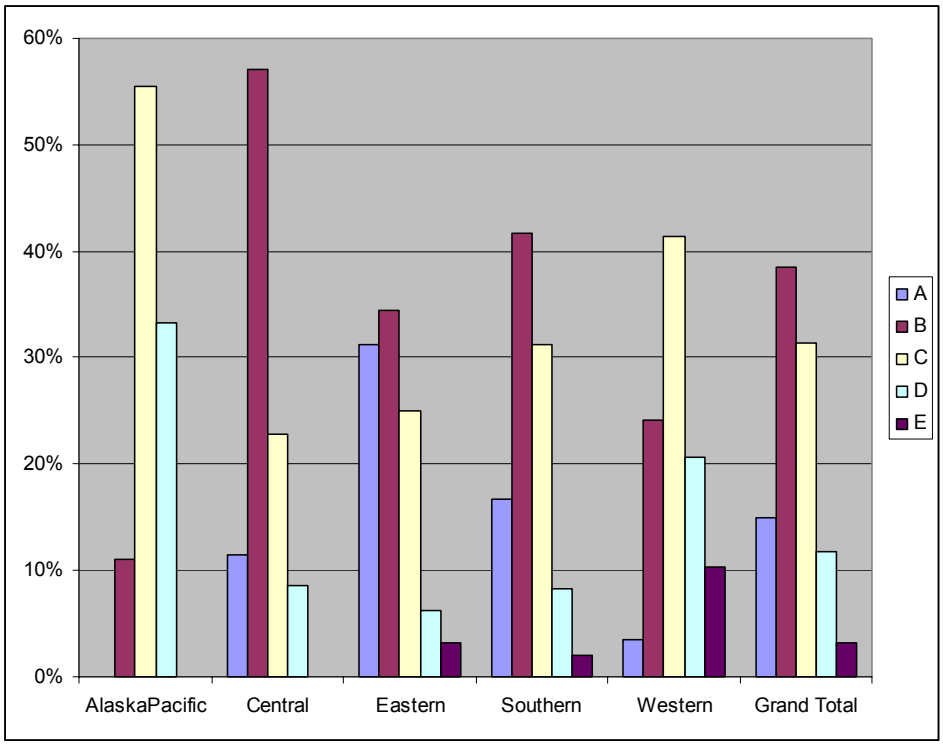
A. 12 - RFC

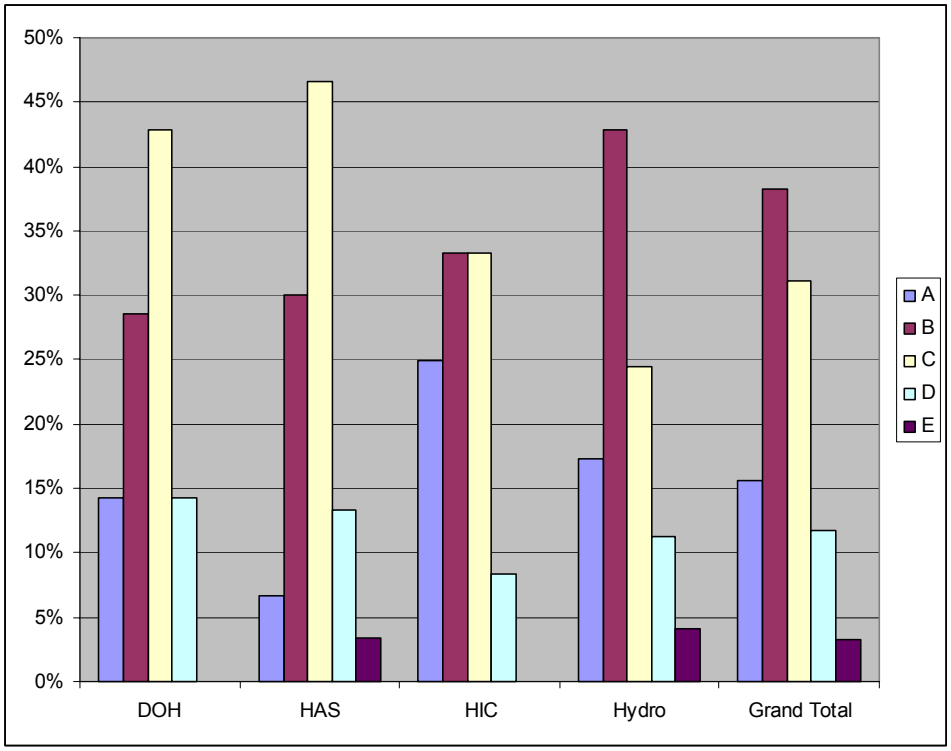
B. 144 - WFO



Question - 16: Please rate your offices support for the flash flood program?

A. 24 - Excellent
B. 59 - Good
C. 48 - Adequate
D. 18 - Poor
E. 5 - Unnecessary



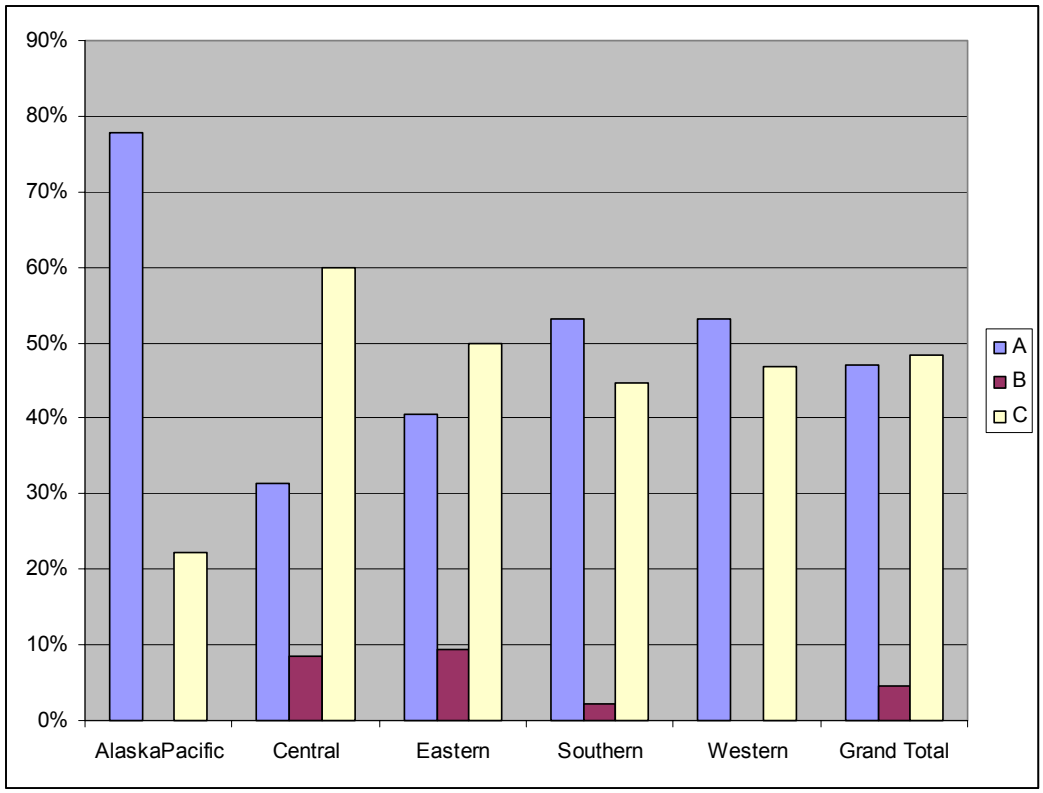


QUESTION - 17: How can your office improve support for the flash flood program?

- **Implementation of gridded FFG appears to be a big issue. However, there is a lot of concern regarding the status of thresh-R**
- **Wide diversity: issue all products from RFC to there is nothing RFC can do to support FF program**
- **coordination and cross-training opportunities with the WFOs is important**
- **Definition of flash flood is not consistently applied. Some offices are still verifying on basement flooding**
- **Data network, both precip and streamflow, hampers ability to monitor effectively**
- **requires additional staffing to monitor the small scale**
- **FFG is often a black box - more training is necessary**
- **Improved site specific models**
- **Need to have a program to better identify flood prone areas**

Question - 18: What field office should be accountable for the river flood program?

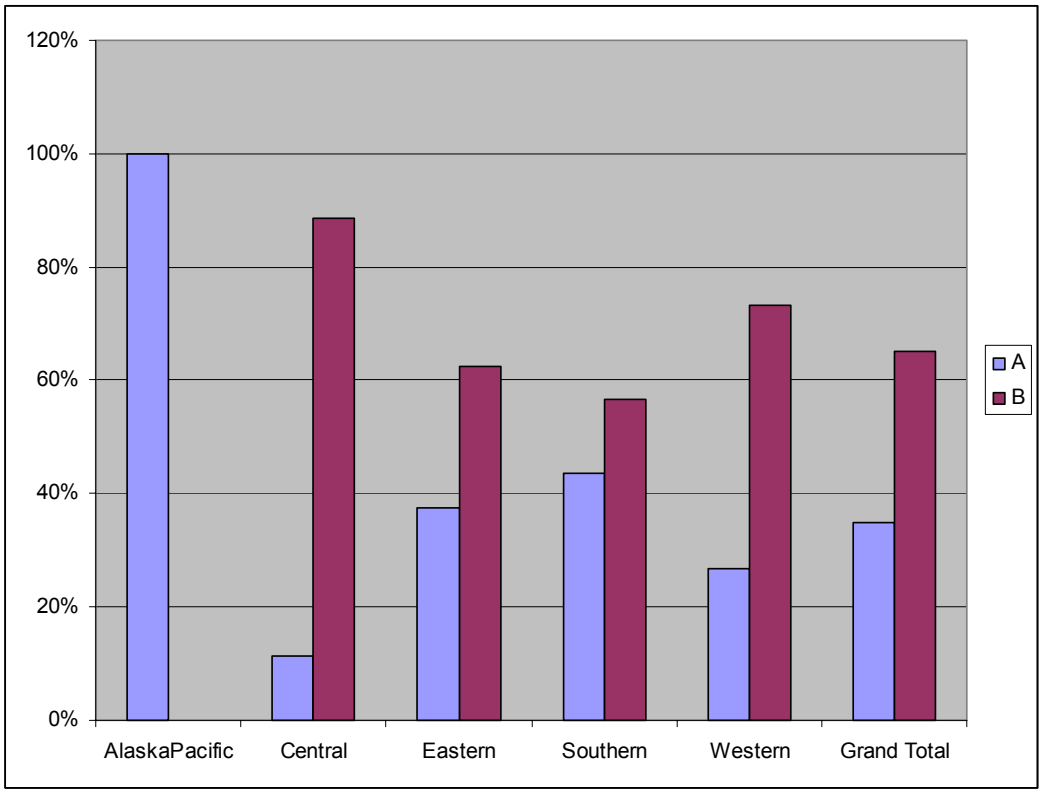
A. 73 - RFC
B. 7 - WFO
C. 76 - Both RFC and WFO

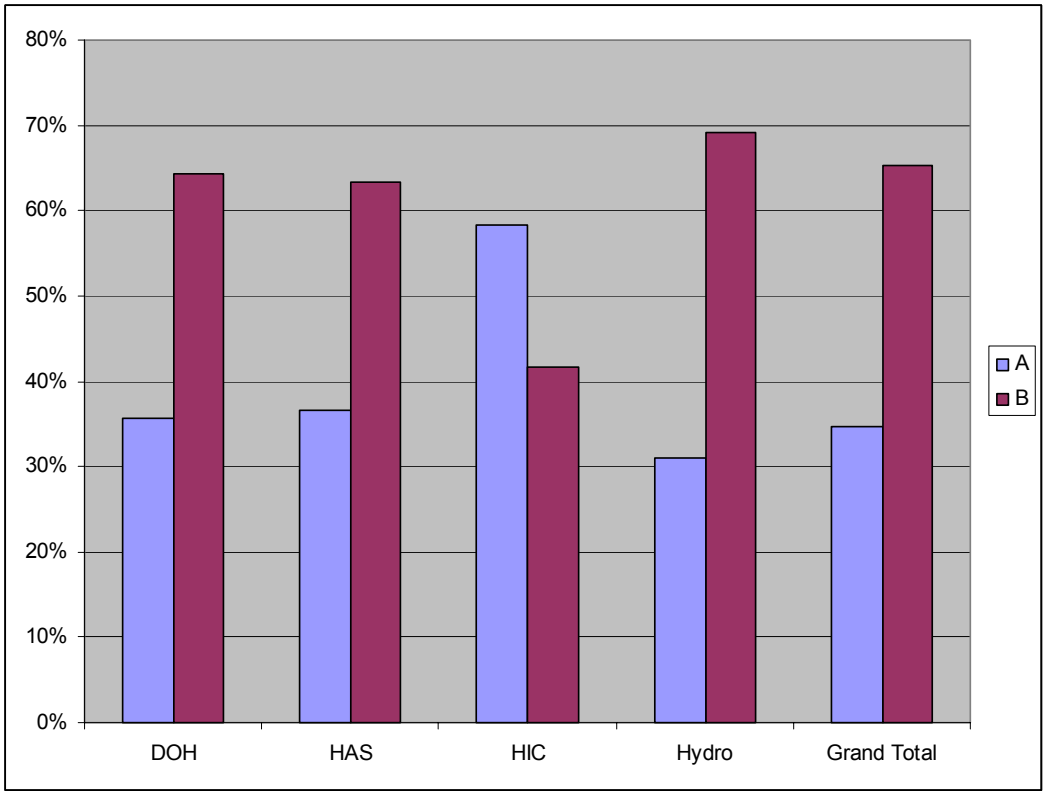


Question - 19: What field office should issue public river flood watches and warnings?

A. 53 - RFC

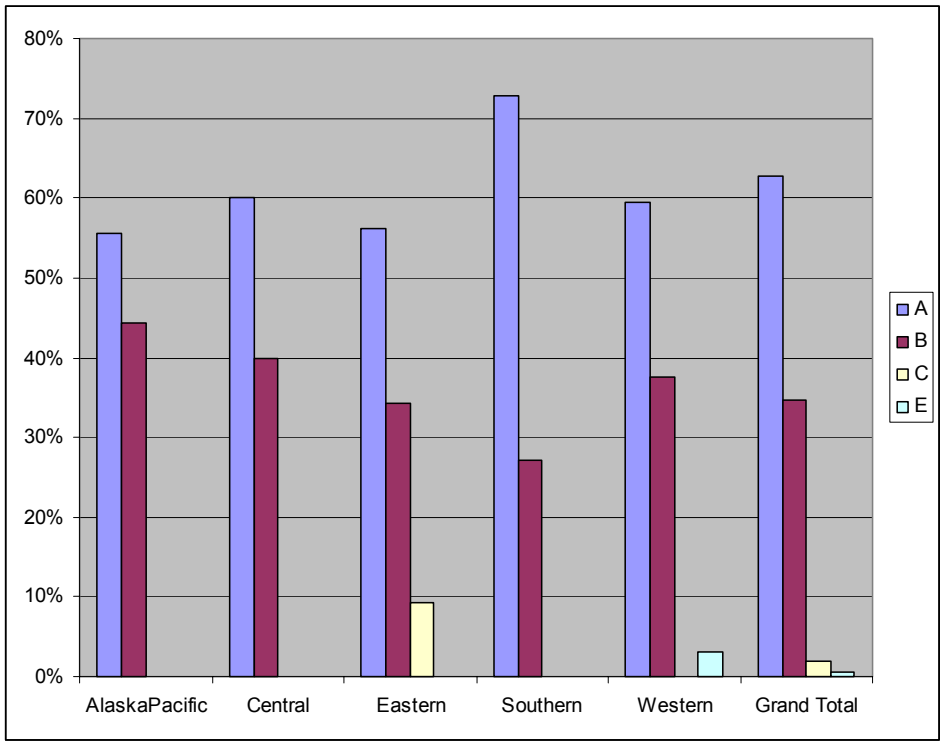
B. 100 – WFO

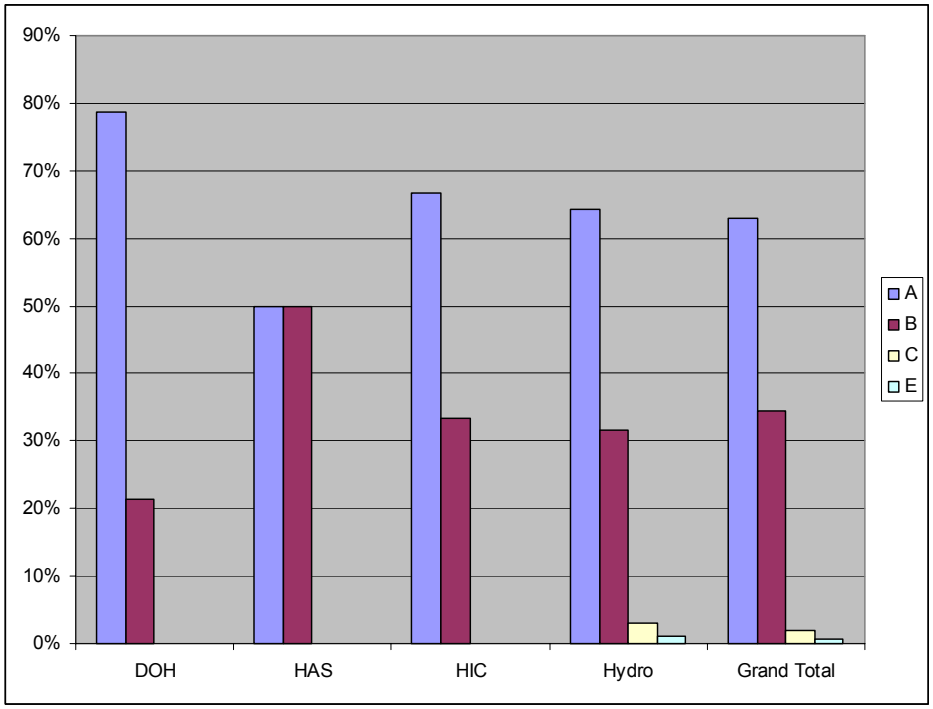




Question - 20: Please rate your office support of the river flood program.

A. 99 - Excellent
B. 54 - Good
C. 3 - Adequate
D. 1 - Unnecessary





QUESTION - 21: How can your office improve support for the river flood program?

- **Data networks - there is a insufficient real time precip data and constant threatened cuts to the stream gaging network make it very difficult to issue adequate forecasts**

- **Model development - This includes both continued calibration efforts of existing models as well as improvements to the forecast models that are availalble. Moving towards distributed modeling is seen as a potential improvement but it requires reliable precip data sources on the model grid which does not currently exist. There is also a significant need to moving to less than 6 hour modeling time steps**

- **WFO Outreach - A better job could be done in orienting WFO staff to RFC operations and products. This may include training in some basic hydrologic science**

- **Improved customer relations - we need to better understand the needs of the NWS customers of our products. We need to understand who are customers are.**

- **Public Product - 7 people indicated that public product issuance should be done from the RFC feeling that the WFO has two problems: (1) little or no added value (2) delays in product issuance. However, 2 specifically felt that this should not be done as it would distract from the other important missions of the RFC including development time**

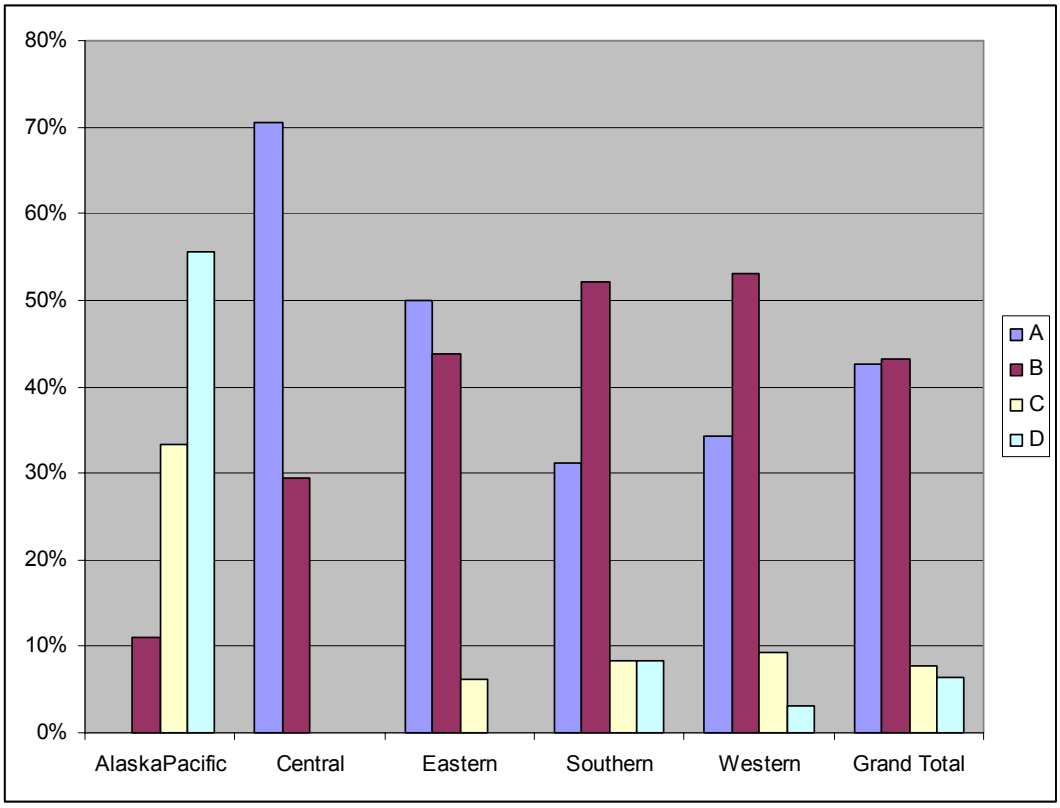
- **Time and Staffing - we never have enough**

- **A WCM position at the RFC for outreach**

- **If the RFCs take over public product, have fewer but larger RFCs**

Question - 22: What role does your office typically play during river flooding episodes?

A. 67 - Let the WFOs decide what products to issue
B. 67 - Assist the WFOs in deciding
C. 12 - Specify what products should be issued
D. 10 - Draft watches and warnings
53 text responses



QUESTION - 22: What role does your office typically play during river flooding episodes?

- **Broad range of answers. This clearly depends on the office and even the individual forecaster preferences. A couple of telling comments:**
  - **I assume this is the approach office would use**
  - **I am never clear as to what my role is**

- **In most cases, there seems to be an indication that coordination is fairly good on significant events but almost non-existent on routine forecasts**

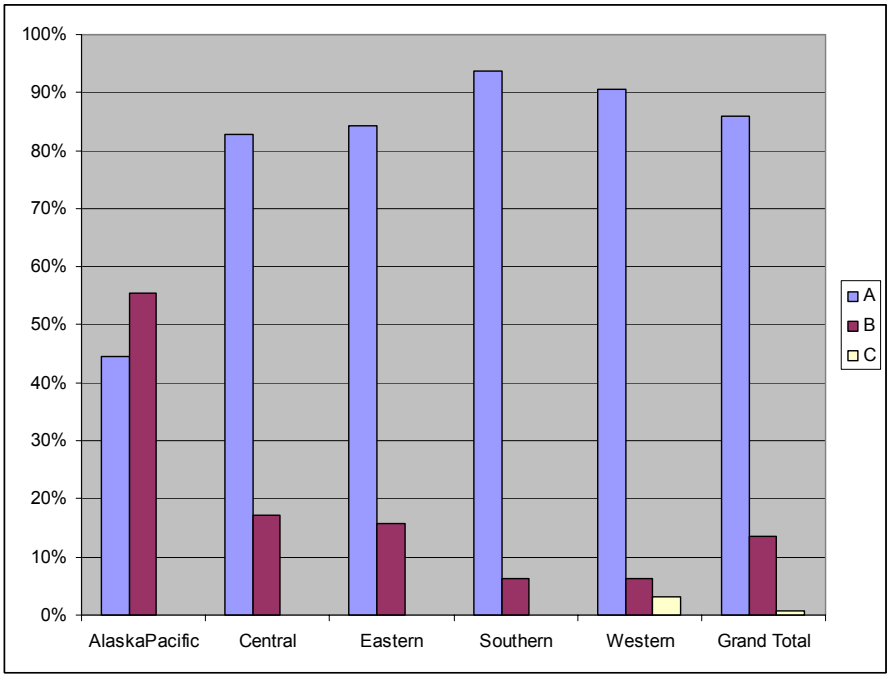
- **SR Flood Outlooks and Alaska Region have put RFCs in role of issuing public products**

- **Many RFCs try to put additional info in text either in RVF or HCM however it is not always clear whether this information is received by WFO**

- **Many responses indicated that their relationship with different WFOs was very different; some welcomed additional RFC input; others are more difficult to talk with**

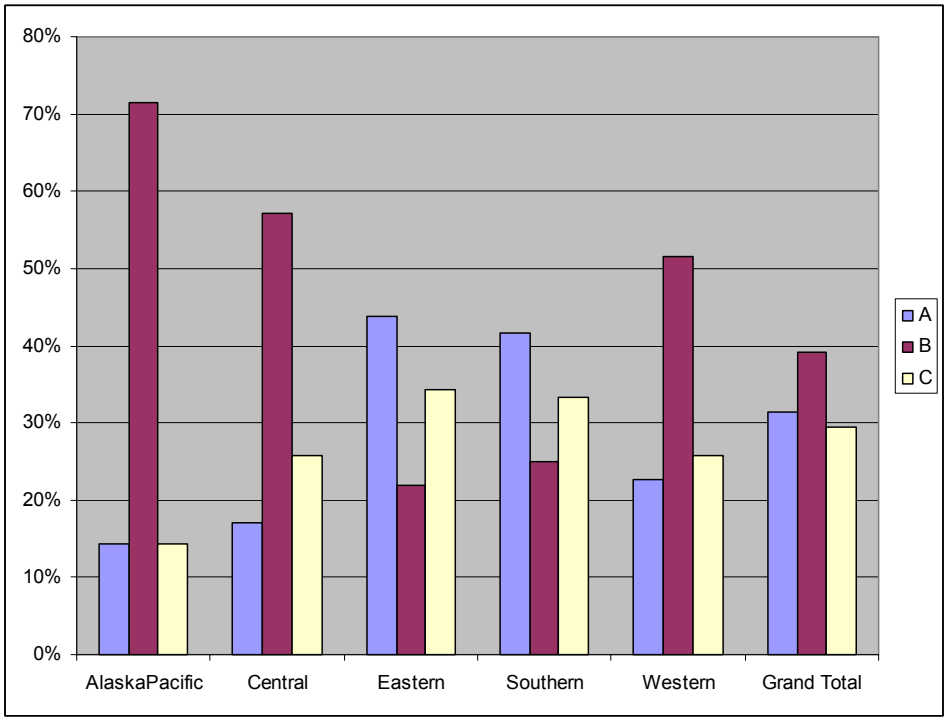
Question - 23: Is the RFC available to provide operational support when required?

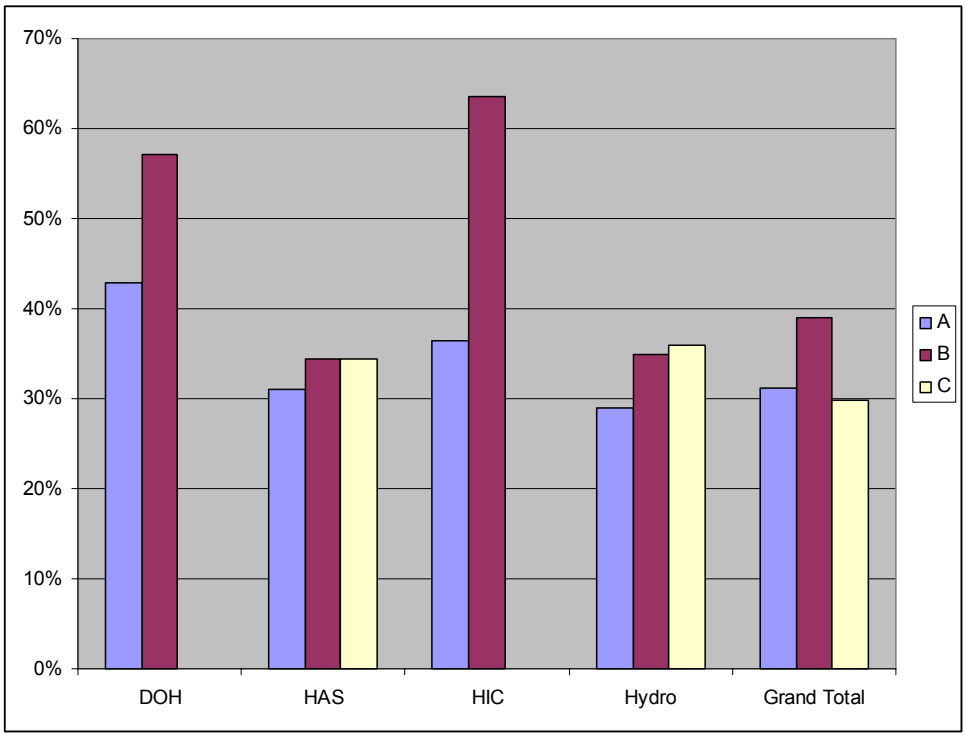
A. 135 - Always
B. 21 - Most of the time
C. 1 - Frequently unavailable



Question - 24: Have hydrologic database inconsistencies resulted in coordination or service problems?

A. 48 - Yes
B. 60 - No
C. 46 - Dont know
42 text responses





QUESTION - 24: Have database inconsistencies resulted in coordination or service problems?

- **Almost all acknowledge that some inconsistencies in location and flood stage exist; however, it appears to be rare that a flood statement has been issued with incorrect information**

- **Significant amount of work is necessary to maintain consistency**

- **Inconsistent office identifiers and naming conventions at this time will make it very difficult to merge**

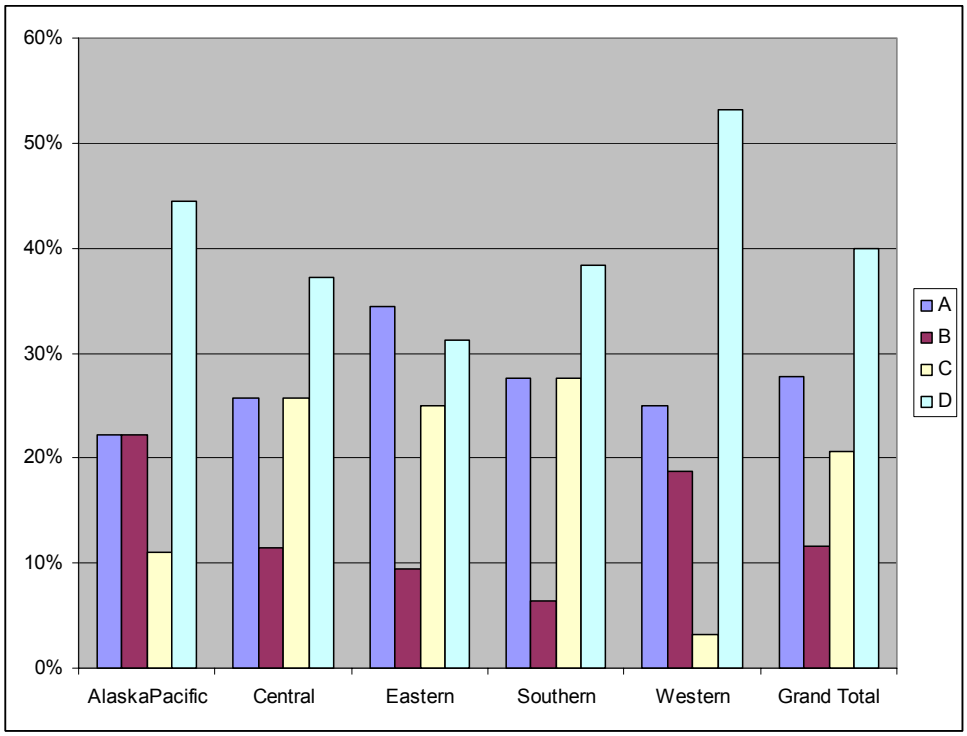
- **Office has procedure to deliver rating curves routinely to wfo**

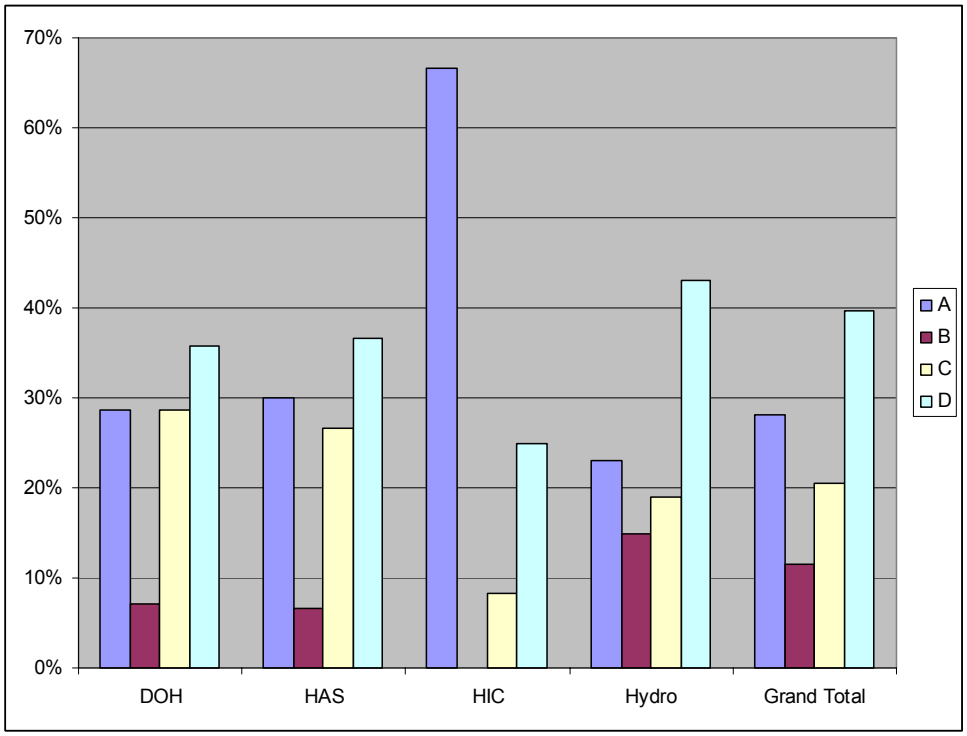
- **Too many places where info is maintained - hydrobase, ofs, local files**

- **APRFC (?) Has been maintaining master copy and providing updates to WFO; however, this will be stopping shortly due to wfo customization**

Question - 25: What will be the impact of AHPS?

A. 44 - Significant improvement
B. 18 - No change
C. 32 - More difficult
D. 62 - Unsure
73 text responses





QUESTION - 25: AHPS Impacts

- **Several major concerns were consistently expressed:**

- **Workload - AHPS is seen as placing a significant new workload on RFC staff with no additional resources to address. Workload is both in the front-end of model development and calibration, computer processing time taking away from ability to perform other work, as well as forecaster time in producing products.**

- **Customer Needs - there is a strong sense that there has not been a clear customer call for many of the products that are being produced, or that they are meeting the needs of a small segment of our user base. There is a great deal of concern that the probabilistic products are going to cause more confusion for many of our users than they will solve problems**

- **Short term forecasts - Many expressed a belief that the user is far more interested in getting a good short term forecast, probabilistic or deterministic rather than longer term forecasts.**

- **Flood Inundation - Many saw flood inundation mapping as significant progress and probably the best part about AHPS. However, even more expressed concern that from a FLDWAV or map availability, or maintenance standpoint it could not be properly done.**

- **Science concerns - Technology is beginning to allow us to perform a lot of tasks and generate a lot of pretty products; however is the science running behind the technology the appropriate science for the job. More and new products does not necessarily equate to better products.**

QUESTION - 26: Additional comments

- **RFCs should at least issue discussion on forecast if not public product**
- **General consensus that flash flood program remain in WFO; less consensus on river watch warning program**
- **Need more WFO accountability for hydro program (*)**
- **Hydro Program Organization**
  - **Regional differences**
  - **National Center merging OHD and RFCs (not in DC)**
  - **Combine similar RFCs**
  - **HL retention continues to be a significant problem**
  - **remove hydro program from NWS and form separate NOAA office**
- **Flash flooding is not well defined program**
- **RFC provide better support and training to WFO**
- **SH improves hydrologic function; when not available the program suffers (*)**
- **lead forecasters need better training**
- **allow SH more focus on hydro**
- **Better exchange visits between WFO and RFC**
- **GS12 computer specialist under HIC instead of ESA**
- **WCM function in RFC (*)**
- **RFC needs to be aggressive in outreach at state and regional levels**